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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,443	12/19/2000	Brian P. Anderson	00-442	4909
7590 02/09/2004			EXAMINER	
Jeffrey L. Myers			TRUONG, LECHI	
Caterpillar Inc. Intellectual Property Department, AB6490 100 N.E. Adams Street Peoria, IL 61629-6490			ART UNIT	PAPER NUMBER
			2126	10
			DATE MAILED: 02/09/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

,		Applicati n N .	Applicant(s)			
		09/740,443	ANDERSON, BRIAN P.			
	Office Action Summary	Examiner	Art Unit			
		LeChi Truong	2126			
	The MAILING DATE f this communication app	ears on the cover sheet with the c	rrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status 1)⊠	Responsive to communication(s) filed on 25 N	November 2003 .				
2a)⊠	•	is action is non-final.				
3)						
Disposition of Claims						
4)⊠	4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
•	Claim(s) <u>1-27</u> is/are rejected.					
	Claim(s) is/are objected to.					
•—	Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers						
,	The specification is objected to by the Examine The drawing(s) filed on is/are: a)☐ accept	<u> </u>	miner			
الــا(١٥						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)	☐ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.						
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			

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DETAILED ACTION

1. Claims 1-27 are presented for examination. This office action is in response to the amendment filed 11/25/2003.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3-7, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notani et al (US Patent 5,931,900) in view of APA (Admitted Prior Art).
- 3. As to claim 1, Notani teaches the invention substantially as claimed including: a first computer based service X (110, Fig 4; col 7, ln 40-67), a second computer based service X (114, Fig 4, col 7, ln 40-67), workbench (the visual information broker, col 7, ln 40-67), first and second application proxies (120 and 122, Fig. 4, col 7, ln 40-67), binary network object (COM and support multiple data model, col 8, ln 1-45), first and second interfaces (112, 116, Fig. 4, col 7, ln 40-67, Browser UI 130/ non-Browser 132, col 8, ln 1-45/ Fig.5), the first computer based service access to service information in the second computer based service through the computer based workbench (the visual information broker (VIE) operating as a middle tier for various engines, col 7, ln 38-65/ a visual information broker (VIB) 26 interfaces to interdomain to obtain information form various sources, col 4, ln 13-55).

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4. Notani does not explicit teaches X as the term "tool" for computer base service.

However, APA teaches X (Computer tool, software tools, tools, page 1, ln 11-32).

5. It would have been obvious one of the ordinary skill in the art at the time the invention

was to apply the combine the teaching of APA to Notani because Notani 'tool would perform

service type operations for certain typed of machines.

6. As to claim 3, Notani does not teach a mobile work machine. However, APA teaches a

mobile (a notebook computer, page 1, ln 10-32).

7. It would have been obvious one of the ordinary skill in the art at the time the invention

was to apply the combine the teaching of Notani and APA because Notani's tool would provide

the service operations with the most complete, the most stable and the most efficient high-quality

services.

8. As to claim 4, Notati teaches the Component Object Model (COM, col 8, ln 15-45).

9. As to claim 5, Notati teaches a constant portion (the queue adaptation dimension, col 7,

ln 1-37), an application interface (the desired source, col 8, ln 1-40).

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10. As to claims 6-7, Notati teaches a respective communication protocol (dynamically loaded specifically designed to interface to particular sources of information, col 4, ln 20-45/ adapters as appropriate to interface with the source, col 8, ln 1-40), the constant portion is belonged to respective communication protocol so constant portions are the respective constant portion.

- 11. As to claim 9, it is an apparatus claim of claim 1, it is rejected for the same reason as claim 1. Additional in claim 9, Notani teaches graphical user interface (a user interface 124, col 7, ln 40-67).
- 12. Claims 2 and 10-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notani et al (US Patent 5,931,900) in view of APA (Admitted Prior Art) as applied to claims 1, 9 above, and further in view of Bullen et al (US. Patent 6,033,226).
- 13. As to claim 2, Notani and APA do not teach diagnostic services. However, Bullen teaches diagnostics, testing and expert advice on the tooling operation (col 7, ln 1-22).
- 14. It would have been obvious one of the ordinary skill in the art at the time the invention was made to combine the teachings of Bullen to Notani and APA because Bullen's diagnostic services would give the user the ability to access different instructional media.

15. As to claim 10, Bullen teach a launch pad, first and second buttons launches a respective one of the first and second service tools (main menu, a specific training category, tooling category, tooling operation, col 2, ln 20-35/ col 4, ln 25-50/ model button, various function module, col 7, ln 1-27).

- 16. **As to claim 11**, Notani and APA do not teach diagnostic advisor, and service information system. However, Bullen teaches diagnostic advisor, and service information system (a reference guide, line drawings, video clips of the operation, diagnostics, testing and expert advice on the tooling operation, col 7, ln 1-22).
- 17. It would have been obvious one of the ordinary skill in the art at the time the invention was made to combine the teachings Notani, APA and Bullen because Bullen's diagnostic services would give the user the ability to access different instructional media.
- 18. As to claims 12-15, Notani teaches a third interface, the third application proxy, a fourth interface, fourth application proxy, a fifth interface, a fifth application proxy, a sixth interface, a sixth application proxy (dynamically loaded adapter specifically designed to interface a particular sources, col 4, ln 20-34/ adaptor create for it, col 7, ln 1-36/ interface 112, 116, col 7, ln 40-65), each application proxy in the application proxies must have a function interface and Notani does not teach a computer based electronic technician, a computer based data view, a computer based engine performance, and a computer based reports and feedback. However,

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Bullen teaches a computer based electronic technician, a computer based data view, a computer based engine performance, and a computer based reports and feedback(a reference guide, line drawings, video clips of the operation, diagnostics, testing and expert advice on the tooling operation, col 7, ln 1-22).

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- 19. **As to claim 16**, it is an apparatus claim of claim 1; it is rejected for the same reason of claim 1. Additional in claim 16, Notani teaches sharing service information (shared interdomain connectivity plane, col 14, ln 50-67).
- 20. As to claim 17 26, they are apparatus claims of claims 2-11; they are rejected for the same reason of claims 2-11.
- 21. As to claim 27, it is an apparatus claim of claim 1, it is rejected for the same reason of claim 1.

Response to the argument

- 22. Applicant amendment filed on 11/25/2003 has been considered but they are not persuasive.
- 23. In the remarks, applicant argued in substance that (1) "Neither this passage, or Notani in general teach or suggest that the engines referred in the passage are service tool". (2) Notani does

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not teach a computer based workbench ... Wherein the first computer based service tool has access to service information on the second computer based services tool through the work bench. (3) Notani does not teach or suggest having multiple service tools accessing service information on other using application proxies. (4) Performing diagnostic routines that determine the status of the machine or a portion thereof.

24. Examiner respectfully traversed Applicant' remarks:

As to point (1), Notani teaches engines can be used as services to handle planning analysis and optimuzation (col 3, ln 60-65). Notani does not explicit teach the term tool for service. However, APA teach computer tool (page 1, ln 10-32).

As to point (2), Notani teaches the visual information broker (VIE) operating as a middle tier for various engines, col 7, ln 38-65/ a visual information broker (VIB) 26 interfaces to interdomain to obtain information form various sources, col 4, ln 13-55).

As to point (3), Notani teaches first and second application proxies (adapters 120 and 122), the vitual information broker (VIE) accesses engines using adapter 120, 122 and visual information broker (VIE) operating as a middle tier for various engines (col 7, ln 40-67).

As to point (4), the term "performing diagnostic routines that determine the status of the machine or a portion thereof" was not in the claim 2.

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25. Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

February 5, 2004

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